1 Data can be measured using different units of storage.

(a) Tick (✓) **one** box to show which of the following is the largest unit of data storage.

A tebibyte (TiB) ☐

B pebibyte (PiB) ☐

C mebibyte (MiB) ☐

D gibibyte (GiB) ☐

[1]

(b) A computer has primary storage.

Give **one** example of primary storage.

Explain the purpose of your chosen example.

Example .....

Explanation .....

.....

.....

.....

[3]

(c) All data is converted to binary to be processed by a computer.

(i) Calculate the binary number for the denary number 175. Show all your working.

.....

.....

.....

.....

..... [2]

(ii) Give the binary number for the given hexadecimal numbers.

15 .....

2D .....

091 .....

[3]

Working space

.....

.....

.....

.....

(d) Binary integers can be added together.

Add the **two** binary integers using binary addition. Show all your working. Give your answer in binary.

```
  1 1 1 0 0 0 1 1
+ 1 1 0 0 1 1 0 0
```

[4]

(e) Calculate the denary number for the two's complement binary integer 10001110. Show all your working.

.....

.....

.....

..... [2]